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S/N 10/675,266

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kenneth J. Burger, et al. Examiner: Cory C Bell
Serial No.: 10/675,266 Group Art Unit: 2164
Filed: September 30, 2003 Confirmation Number: 6175
Title: Normalizing Records Docket: ROC920030304US1

APPEAL BRIEF
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is presented in support of the Notice of Appeal filed on December 6, 2007, from the Final Rejection of claims 1, 4-11, 14-16, and 18-20 of the above-identified application, as set forth in the Final Office Action mailed on September 6, 2007.

Please charge \$510.00 to Deposit Account 09-0465 to cover the fee for filing an appeal brief. Please charge any additional fees or credit overpayment to Deposit Account 09-0465. Appellant respectfully requests reversal of the Examiner's rejection of pending claims 1, 4-11, 14-16, and 18-20.

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1. Real Party in Interest

The real party in interest, in addition to the inventors, Kenneth J. Burger, George F. DeStefano, Susan J. Funk, and Andrew J. Streit, is the assignee, International Business Machines Corporation, a corporation organized and existing under and by virtue of the laws of the State of New York, and having an office and place of business at New Orchard Road, Armonk, New York 10504.

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2. Related Appeals and Interferences

There are no other prior or pending appeals, interferences, or judicial proceedings, which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision.

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3. Status of Claims

On December 6, 2007, appellant appealed from the final rejection of claims 1, 4-11, 14-16, and 18-20 made in the Final Office Action dated September 6, 2007. Claims 2-3, 12-13, and 17 were canceled without prejudice or disclaimer. Finally rejected claims 1, 4-11, 14-16, and 18-20 on appeal are set forth in the Claims Appendix.

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4. Status of Amendments

Subsequent to the Final Office Action dated September 6, 2007, appellant did not file any amendments.

5. Summary of Claimed Subject Matter

As described, by way of example and not of limitation, at page 2, lines 5-12 of appellant's specification and in Fig. 1, elements 128, 130, 134, 136, 104, and 162, in Fig. 3, elements 128 and 310, in Fig. 5, elements 522 and 524, in Fig. 6A, elements 162, 605, 610, 615, and 620, in Fig. 6B, elements 136, 655, 660, 665, and 670, and in Fig. 7, elements 715, 720, 725, 730, and 735, "A method, apparatus, system, and signal-bearing medium are provided that in an embodiment receive records from information suppliers and prepare a report, which includes a subset of the characteristics of the records. The characteristics are selected based on a model norm, and the characteristics are ordered within the report based on a relative significance specified in the model norm. Also, the records are ordered within the report based on a sort rule in the model norm. In this way, the records received from disparate information suppliers are normalized by the model norm to use a consistent format, which is more convenient for the requestor of the report."

With reference to claim 1, an embodiment of the invention comprises a method, which is described, by way of example and not of limitation, in the specification, at page 2, line 5, at page 5, lines 25-28, and in Fig. 7, elements 700, 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, and 799.

The method of claim 1 comprises:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers, which is described, by way of example and not of limitation, in the specification at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 1-8, at page 14, lines 4-12, at Fig. 1, elements 102, 104, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, element 705;

finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-30, at page 8, lines 1-2, at page 14, lines 13-20, at Fig. 1, elements 102, 104, 106, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, elements 710 and 715;

requesting a plurality of records from the one of the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 10-13, at page 5, lines 18-23, at page 7, lines 17-30, at page 8, lines 1-2, at page 14, lines 15-20, at Fig. 1, elements 102, 104, 115, 126, 134, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, and at Fig. 7, element 715;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 8-10, at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 9-29, at page 11, lines 1-2, at page 14, lines 21-25, at Fig. 1, elements 104, 127, 128, and 130, at Fig. 3, elements 128, 302, 304, 306, 308, 310, and 312, and at Fig. 7, element 725;

selecting a subset of a plurality of characteristics from the plurality of records based on the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, 130, and 134, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 730;

preparing a report with the subset, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 3, lines 10-15, at page 5, lines 22-24, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, 134, 136, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730;

ordering the subset of the plurality of characteristics in the report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the plurality of records, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at Fig. 1, elements 102, 115, 127, 130, 134, 136, at Fig. 5, elements 130, 522, and 524, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730;

ordering the plurality of records in the report based on a sort rule in the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-7 and 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 29, at page 15, lines 1-2, at Fig. 1, elements 102, 115, 127, 130, and 136, at Fig. 5, elements 130, 515, and 528, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 735;

receiving a favored norm from the one of the plurality of information suppliers of a selected record in the report, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-28, at page 11, lines 3-17, at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 18-20, at page 15, lines 5-14, in Fig. 1, elements 102, 104, 115, 127, 136, and 160, at Fig. 4, element 160, and at Fig. 7, elements 720 and 745;

selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-17, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 134, 160, at Fig. 4, elements 160, 405, 410, 415, 420, 422, 424, 426, and 428, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 745 and 750;

creating a second report with the second subset, which is described, by way of example and not of limitation, in the specification at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and at Fig. 7, element 750.

With reference to claim 4, the preparing the report further comprises: preparing extra characteristics not in the subset in a least-significant column of the report as a sequence of name-value pairs, which is described, by way of example and not of limitation, in the specification at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at page 15, lines 1-4, at Fig. 1, elements 102, 115, 127, 130, 134, and 136, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, element 621, and at Fig. 7, elements 730 and 735.

With reference to claim 5, the preparing extra characteristics further comprises: ordering the name-value pairs based on a relative significance in a favored norm, which is described, by way of example and not of limitation, in the specification at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at page 15, lines 1-4, at Fig. 1,

elements 102, 115, 127, 130, 134, 136, and 160, at Fig. 4, elements 160 and 424, at Fig. 6A, element 621, and at Fig. 7, elements 730 and 735.

With reference to claim 6, an embodiment of the invention comprises a storage medium comprising various means, which is described, by way of example and not of limitation, in the specification at page 9, lines 10-14, which recites:

“(1) information permanently stored on a non-rewriteable storage medium, e.g., a read-only memory device attached to or within an electronic device, such as a CD-ROM readable by a CD-ROM drive; (2) alterable information stored on a rewriteable storage medium, e.g., a hard disk drive or diskette.”

The storage medium of claim 6 comprising various means is further described, by way of example and not of limitation, in the specification at page 3, lines 19-28, at page 4, lines 1-30, at page 5, lines 1-29, and at page 6, lines 1-2, which recites:

“Referring to the Drawing, wherein like numbers denote like parts throughout the several views, Fig. 1 depicts a block diagram of an example system 100 for implementing an embodiment of the invention. The system 100 includes an electronic device 102, an information supplier 104, and a client 106, all connected via a network 108. Although only one electronic device 102, one information supplier 104, one client 106, and one network 108 are shown, in other embodiments any number or combination of them may be present. Although the information supplier 104 and the client 106 are illustrated as being connected to the electronic device 102 via the same network 108, in other embodiments they may be connected to the electronic device 102 via different networks. Although the electronic device 102, the information supplier 104, the client 106, and the network 108 are illustrated in Fig. 1 as being discrete, separate components, in other embodiments some or all of their functions and elements may be combined.

In an embodiment, the electronic device 102 functions as a server. The electronic device 102 includes a processor 110, a storage device 115, an input device 120, and an output device 122, all connected directly or indirectly via a bus 125. The processor 110 represents a central processing unit of any type of architecture, such as a CISC (Complex Instruction Set Computing), RISC (Reduced Instruction Set Computing), VLIW (Very Long Instruction Word), or a hybrid architecture, although any appropriate processor may be used. The

processor 110 executes instructions and includes that portion of the electronic device 102 that controls the operation of the entire electronic device. Although not depicted in Fig. 1, the processor 110 typically includes a control unit that organizes data and program storage in memory and transfers data and other information between the various parts of the electronic device 102. The processor 110 reads and/or writes code and data to/from the network 108, the storage device 115, the input device 120, and/or the output device 122.

Although the electronic device 102 is drawn to contain only a single processor 110 and a single bus 125, embodiments of the present invention apply equally to electronic devices that may have multiple processors and multiple buses with some or all performing different functions in different ways.

The storage device 115 represents one or more mechanisms for storing data. For example, the storage device 115 may include read only memory (ROM), random access memory (RAM), magnetic disk storage media, optical storage media, flash memory devices, and/or other machine-readable media. In other embodiments, any appropriate type of storage device may be used. Although only one storage device 115 is shown, multiple storage devices and multiple types of storage devices may be present. Although the storage device 115 is shown in Fig. 1 as a single monolithic entity, the storage device 115 may in fact be distributed and/or hierarchical, as is known in the art. For example, the storage device 115 may exist in multiple levels of caches, and these caches may be further divided by function, so that one cache holds instructions while another holds non-instruction data which is used by the processor or processors. The storage device 115 may further be distributed and associated with different processors or sets of processors, as is known in any of various so-called non-uniform memory access (NUMA) computer architectures. Further, although the electronic device 102 is drawn to contain the storage device 115, it may be distributed across other electronic devices, such as devices connected to the network 108.

The storage device 115 includes a data assembler 126, a data normalizer 127, a data dictionary 128, a model norm 130, a supplier registry 132, records 134, and a report 136, all of which may in various embodiments have any number of instances. Although the data assembler 126, the data normalizer 127, the data dictionary 128, the model norm 130, the supplier registry 132, the records 134, and the report 136 are all illustrated as being contained

within the storage device 115 in the electronic device 102, in other embodiments some or all of them may be on different electronic devices and may be accessed remotely, e.g., via the network 108.

The data assembler 126 registers the information suppliers 104 in the supplier registry 132 and creates the model norm 130. In an embodiment, the data assembler 126 selects the information suppliers 104 based on the opinions of the designers of the data assembler 126, based on input from users, based on content of a publicly accessible registry, or based on any combination thereof. The data assembler 126 receives requests for information from the client 106 and in response finds the appropriate information suppliers 104 using the supplier registry 132. The data assembler 126 then sends a request to the appropriate information supplier(s) 104 and receives records from the information supplier(s) 104, which the data assembler 126 stores as the records 134. The data normalizer 127 then creates the report 136 based on the records 134 using the model norm 130 and sends the report 136 to the client 106 in response to the client's request.

In an embodiment, the data assembler 126 and the data normalizer 127 include instructions capable of executing on the processor 110 or statements capable of being interpreted by instructions executing on the processor 110 to carry out the functions as further described below with reference to Fig. 7. In another embodiment, the data assembler 126 and/or the data normalizer 127 may be implemented in hardware via logic gates and/or other appropriate hardware techniques in lieu of or in addition to a processor-based system."

The storage medium of claim 6 further comprises:

means for registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers, which is described, by way of example and not of limitation, in the specification at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 1-8, at page 14, lines 4-12, at Fig. 1, elements 102, 104, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, element 705;

means for finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-

30, at page 8, lines 1-2, at page 14, lines 13-20, at Fig. 1, elements 102, 104, 106, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, elements 710 and 715;

means for requesting a plurality of records from the one of the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 10-13, at page 5, lines 18-23, at page 7, lines 17-28, at page 14, lines 15-20, at Fig. 1, elements 102, 104, 115, 126, 134, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, and at Fig. 7, element 715;

means for creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 8-10, at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 9-29, at page 11, lines 1-2, at page 14, lines 21-25, at Fig. 1, elements 104, 127, 128, and 130, at Fig. 3, elements 128, 302, 304, 306, 308, 310, and 312, and at Fig. 7, element 725;

means for selecting a subset of a plurality of characteristics from the plurality of records based on the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, and 130, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 730;

means for preparing a report with the subset, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 3, lines 10-15, at page 5, lines 22-24, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, 134, 136, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730;

means for ordering the subset of the plurality of characteristics in the report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the plurality of records, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at Fig. 1, elements 102, 115, 127, 130, 134, 136,

at Fig. 5, elements 130, 522, and 524, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, at Fig. 6B, elements 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730;

means for receiving a favored norm from the one of the plurality of information suppliers of a selected record in the report, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-28, at page 11, lines 3-17, at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 18-20, at page 15, lines 5-14, in Fig. 1, elements 102, 104, 115, 127, 136, and 160, at Fig. 4, element 160, and at Fig. 7, elements 720 and 745;

means for selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-17, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 134, 160, at Fig. 4, elements 160, 405, 410, 415, 420, 422, 424, 426, and 428, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 745 and 750; and

means for creating a second report with the second subset, which is described, by way of example and not of limitation, in the specification at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and at Fig. 7, element 750.

With reference to claim 7, the means for preparing further comprises: means for preparing extra characteristics not in the subset in a least-significant column of the report as a sequence of name-value pairs, which is described, by way of example and not of limitation, in the specification at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at page 15, lines 1-4, at Fig. 1, elements 102, 115, 127, 130, 134, and 136, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, element 621, and at Fig. 7, elements 730 and 735.

With reference to claim 8, the means for preparing further comprises: means for preparing extra characteristics not in the subset in a series of columns ordered based on a relative significance in a favored norm, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-17, at page 12, lines 14-30, at page 13, lines

1-24, at page 14, lines 1-3 and 26-29, at page 15, lines 1-4, at Fig. 1, elements 102, 115, 127, 130, 134, 136, and 160, at Fig. 4, elements 160 and 424, and at Fig. 7, elements 730 and 735.

With reference to claim 9, the means for preparing further comprises: means for preparing an indicator of whether extra characteristics not in the subset are available, which is described, by way of example and not of limitation, in the specification at page 12, lines 14-30, at page 13, lines 1-24, and at Fig. 1, elements 102, 115, 127, and 136.

With reference to claim 10, the storage medium of claim 6 further comprises: means for ordering the plurality of records in the report based on a sort rule in the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-7 and 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 29, at page 15, lines 1-2, at Fig. 1, elements 102, 115, 127, 130, and 136, at Fig. 5, elements 130, 515, and 528, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 735.

With reference to claim 11, an embodiment of the invention comprises a storage medium encoded with instructions when executed, which is described, by way of example and not of limitation, in the specification at page 4, lines 20-30, at page 5, lines 1-28, at page 9, lines 10-14, and at Fig. 1, elements 102, 110, 115, 126, and 127.

With further reference to claim 11, the instructions when executed comprise:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers, which is described, by way of example and not of limitation, in the specification at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 1-8, at page 14, lines 4-12, at Fig. 1, elements 102, 104, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, element 705;

finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-30, at page 8, lines 1-2, at page 14, lines 13-20, at Fig. 1, elements 102, 104, 106, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, elements 710 and 715;

requesting a plurality of records from the one of the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 10-13, at page 5, lines 18-23, at page 7, lines 17-28, at page 14, lines 15-20, at Fig. 1, elements 102, 104, 115, 126, 134, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, and at Fig. 7, element 715;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 8-10, at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 9-29, at page 11, lines 1-2, at page 14, lines 21-25, at Fig. 1, elements 104, 127, 128, and 130, at Fig. 3, elements 128, 302, 304, 306, 308, 310, and 312, and at Fig. 7, element 725;

selecting a subset of a plurality of characteristics from a plurality of records received from the one of a plurality of information suppliers, wherein the selecting of the subset is based on the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, and 130, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 730;

preparing a first report with the subset, wherein the preparing further comprises ordering the plurality of records in the first report based on a sort rule in the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 3, lines 10-15, at page 5, lines 22-24, at page 11, lines 18-30, at page 12, lines 1-7, at page 14, lines 26-29, at page 15, lines 1-4, at Fig. 1, elements 102, 115, 127, 136, at Fig. 5, element 528, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, elements 730 and 735;

ordering the subset of the plurality of characteristics in the first report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the records, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at Fig. 1, elements 102, 115, 127, 130, 134, 136, at Fig. 5,

elements 130, 522, and 524, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, at Fig. 6B, elements 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730;

receiving a favored norm from the one of the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-28, at page 11, lines 3-17, at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 18-20, at page 15, lines 5-14, in Fig. 1, elements 102, 104, 115, 127, 136, and 160, at Fig. 4, element 160, and at Fig. 7, elements 720 and 745;

selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset, which is described, by way of example and not of limitation, in the specification at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 134, 160, at Fig. 4, elements 160, 405, 410, 415, 420, 422, 424, 426, and 428, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 745 and 750; and

creating a second report with the second subset, which is described, by way of example and not of limitation, in the specification at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and at Fig. 7, element 750.

With reference to claim 14, the creating further comprises: ordering the subset of the plurality of characteristics in the second report based on a relative significance in the favored norm, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-16, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and 160, at Fig. 4, element 424, and at Fig. 7, element 745.

With reference to claim 15, the creating further comprises: ordering the plurality of records in the second report based on a sort rule in the favored norm, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-16, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and 160, at Fig. 4, element 428, and at Fig. 7, element 745.

With reference to claim 16, an embodiment of the invention comprises an electronic device, which is described, by way of example and not of limitation, in the specification at page 3, lines 19-28, at page 4, lines 1-30, at page 5, lines 1-29, at page 6, lines 1-2, at page 7, lines 7-16, and at Fig. 1, elements 102, 110, 115, 120, 122, and 125.

With further reference to claim 16, the electronic device comprises a processor, which is described, by way of example and not of limitation, in the specification at page 4, lines 4-19 and 27-30, at page 5, lines 25-28, at page 7, lines 3-6, and at Fig. 1, element 110.

With further reference to claim 16, the electronic device comprises a storage device encoded with instructions when executed, which is described, by way of example and not of limitation, in the specification at page 4, lines 20-30, at page 5, lines 1-13 and 25-28, and at Fig. 1, elements 115, 126, and 127.

With further reference to claim 16, the instructions when executed on the processor comprise:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers, which is described, by way of example and not of limitation, in the specification at page 5, lines 14-15, at page 7, lines 17-30, at page 8, lines 1-2, at page 10, lines 1-8, at page 14, lines 4-12, at Fig. 1, elements 102, 104, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, element 705;

finding the plurality of areas of interest associated with the plurality of information suppliers that match a field of interest requested by a client, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-30, at page 8, lines 1-2, at page 14, lines 13-20, at Fig. 1, elements 102, 104, 106, 115, 126, and 132, at Fig. 2, elements 132, 205, 210, 215, 220, and 225, and at Fig. 7, elements 710 and 715;

requesting a plurality of records from the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 10-13, at page 5, lines 18-23, at page 7, lines 17-28, at page 14, lines 15-20, at Fig. 1, elements 102, 104, 115, 126, 134, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, and at Fig. 7, element 715;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers, which is described, by way of example and not of limitation, in the specification at page 3, lines 8-10, at page 5, lines 14-15, at page 7, lines 17-28, at page 10, lines 9-29, at page 11,

lines 1-2, at page 14, lines 21-25, at Fig. 1, elements 104, 127, 128, and 130, at Fig. 3, elements 128, 302, 304, 306, 308, 310, and 312, and at Fig. 7, element 725,

selecting a first subset of a plurality of characteristics from the plurality of records received from the plurality of information suppliers, wherein the selecting the first subset is based on the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, and 130, at Fig. 5, elements 130, 505, 510, 515, and 522, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 730,

preparing a first report with the first subset, which is described, by way of example and not of limitation, in the specification at page 2, lines 5-12, at page 3, lines 10-15, at page 5, lines 22-24, at page 14, lines 26-29, at Fig. 1, elements 102, 115, 127, 134, 136, and 162, at Fig. 6A, elements 162, 605, 610, 615, and 620, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730,

ordering the first subset of the plurality of characteristics in the first report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the records, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-30, at page 13, lines 1-29, at page 14, lines 1-3 and 26-29, at Fig. 1, elements 102, 115, 127, 130, 134, 136, at Fig. 5, elements 130, 522, and 524, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 730,

ordering the plurality of records in the first report based on a sort rule in the model norm, which is described, by way of example and not of limitation, in the specification at page 2, lines 8-10, at page 3, lines 15-17, at page 11, lines 18-30, at page 12, lines 1-7 and 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 29, at page 15, lines 1-2, at Fig. 1, elements 102, 115, 127, 130, and 136, at Fig. 5, elements 130, 515, and 528, at Fig. 6B, elements 136, 655, 660, 665, 670, 672, 674, and 676, and at Fig. 7, element 735,

receiving a favored norm from one of the plurality of information suppliers, wherein the one of the plurality of information suppliers is associated with a selected record in the

first report, which is described, by way of example and not of limitation, in the specification at page 7, lines 17-28, at page 11, lines 3-17, at page 12, lines 14-30, at page 13, lines 1-29, at page 14, lines 1-3 and 18-20, at page 15, lines 5-14, in Fig. 1, elements 102, 104, 115, 127, 136, and 160, at Fig. 4, element 160, and at Fig. 7, elements 720 and 745,

selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-17, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 134, 160, at Fig. 4, elements 160, 405, 410, 415, 420, 422, 424, 426, and 428, at Fig. 6A, elements 162, 605, 610, 615, 620, 621, 622, 624, and 626, and at Fig. 7, element 745 and 750, and

creating a second report with the second subset, which is described, by way of example and not of limitation, in the specification at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and at Fig. 7, element 750.

With reference to claim 18, the creating further comprises: ordering the second subset in the second report based on a relative significance in the favored norm, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-16, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and 160, at Fig. 4, element 424, and at Fig. 7, element 745.

With reference to claim 19, the creating further comprises: ordering the plurality of records in the second report based on a sort rule in the favored norm, which is described, by way of example and not of limitation, in the specification at page 11, lines 3-16, at page 15, lines 5-14, at Fig. 1, elements 102, 115, 127, 136, and 160, at Fig. 4, element 428, and at Fig. 7, element 745.

With reference to claim 20, the instructions further comprise: propagating the plurality of records with a default value specified in the model norm if the plurality of records lack a value, which is described, by way of example and not of limitation, in the specification at page 11, lines 18-30 at page 12, lines 1-7, at page 15, lines 2-3, at Fig. 1, elements 102, 115, 127, 130, 134, and 136 at Fig. 5, elements 130, 505, 510, 515, and 526, and at Fig. 7, element 735.

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6. Grounds of Rejection to be Reviewed on Appeal

1. Whether claims 1, 4-11, 14-16, and 18-19 are unpatentable under 35 U.S.C. 103(a) over Barnes (US Patent Number 6,993,533 B1) in view of the Open Directory Project and the Open Directory Project Terms of Use.

2. Whether claim 9 is unpatentable under 35 U.S.C. 103(a) over Barnes (US Patent Number 6,993,533 B1) in view of the Open Directory Project and Tabb (US Patent Number. 5,603,025).

3. Whether claim 20 is unpatentable under 35 U.S.C. 103(a) over Barnes (US Patent Number 6,993,533 B1) in view of the Open Directory Project, and Pearson ("Default Value").

7. Argument

A) The Applicable Law

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ 2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, “[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The *Fine* court stated that:

Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation

of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir. 1992). At the same time, however, although it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979)).

A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Spornoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963).

If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP § 2143.01.

The test for obviousness under § 103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). Furthermore, claims must be interpreted in light of the specification, claim language, other claims and prosecution history. *Panduit Corp. v.*

Dennison Mfg. Co., 810 F.2d 1561, 1568, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987), *cert. denied*, 481 U.S. 1052 (1987). At the same time, a prior patent cited as a § 103 reference must be considered in its entirety, "*i.e.* as a *whole*, including portions that lead away from the invention." *Id.* That is, the Examiner must, as one of the inquiries pertinent to any obviousness inquiry under 35 U.S.C. § 103, recognize and consider not only the similarities but also the critical differences between the claimed invention and the prior art. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir. 1990). Finally, the Examiner must avoid hindsight. *Id.*

As explained in M.P.E.P. § 2112, the express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. But, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Further, "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

B) Discussion of the Rejections

1. Claims 1, 4-11, 14-16, and 18-19 are rejected under 35 U.S.C. 103(a) over Barnes (US Patent Number 6,993,533 B1), hereinafter "Barnes," in view of the Open Directory Project and the Open Directory Project Terms of Use.

Claims 1, 4-11, 14-16, and 18-19

Claim 1 recites: "requesting a plurality of records from the one of the plurality of information suppliers; creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers; selecting a subset of a plurality of characteristics from the plurality of records based on the model norm," which is not taught or suggested by the hypothetical combination of Barnes, The Open Directory Project, and the Open Directory Project Terms of Use for the reasons argued below.

The Examiner admits that Barnes “fails to express disclose the format being standardized by an agreement among the plurality of information suppliers,” so the Examiner relies on the Open Directory Project Terms of Use, which recites: “You acknowledge that Netscape and the ODP staff have unfettered editorial discretion to determine the structure and content of the ODP.”

The Open Directory Project recites: “The Open Directory is a hierarchical web directory, organized by subject. The directory is maintained by editors who join and choose to review & maintain sites listed in one of (sic) more categories. The best way to get your site listed is to: 1. Find the most appropriate category. 2. Submit your site information from the Add URL link at the top of that category page.” The Open Directory Project further recites: “The purpose of the Open Directory Project is to “build the largest human-edited directory of the Web.”

Thus, the acknowledgement in the Open Directory Project Terms of Use merely gives “Netscape and the ODP staff ... unfettered editorial discretion to determine the structure and content of the ODP,” which is “a hierarchical web directory” of URLs, “organized by subject” and whose purposes and intent is to “build the largest human-edited directory of the Web.”

The Open Directory Project Terms of Use does not contain any agreement regarding the format, structure, or content of the sites that are linked to by the ODP. In fact, an agreement regarding the format, structure, or content of the sites that are linked to by the ODP would not be possible because the ODP includes links to such disparate sites as fall under the categories of “Kids,” “Indonesia,” “Video Games,” “Fitness,” “Humor,” “Shopping,” and “Biology.”

Thus, modifying the Open Directory Project to require a data dictionary whose format is standardized by an agreement among information suppliers, based on which a model norm is created, where a subset of a plurality of characteristics is selected from the plurality of records based on the model norm (as recited in claim 1) would destroy the stated purpose of the Open Directory Project, which is “build the largest human-edited directory of the Web,” since it would require all of the web sites categorized by the Open Directory Project

(including such disparate sites as “Kids,” “Indonesia,” “Video Games,” “Fitness,” “Humor,” “Shopping,” and “Biology”) to agree to a standard data dictionary.

Modifying Barnes with the Open Directory Project and the Open Directory Project Terms of use also destroys the stated purpose of Barnes. The stated purpose of Barnes (at column 1, lines 6-8) is to generate and distribute “reports from a relational database,” and the Examiner relies on Barnes at Fig. 5 (Report Pattern Parameters 500) for a model norm (and claim 1 creates the model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers).

Barnes at Fig. 5 includes “illustrative SQL commands fashioned to operate on a database structured in accordance with Fig. 4,” as explained by Barnes at column 12, lines 22-25. Modifying the Barnes SQL commands of Fig. 5 (which are fashioned to operate on a database structured in accordance with Barnes Fig. 4) to be created based on the Open Directory Project “structure and content of the ODP,” which is “a hierarchical web directory” of URLs, “organized by subject” would destroy the ability of Barnes to generate and distribute reports from a relational database because Barnes would lose its field names (e.g., fields 554, 556, and 558, etc.) which are necessary for Barnes to perform its SQL commands against the database having the structure of Fig. 4, in order to create its result set (explained by Barnes at column 13, lines 58-59) and to create the Barnes report (explained by Barnes at column 14, lines 7-8).

Thus, Barnes, the Open Directory Project and the Open Directory Project Terms of Use cannot be properly combined, do not teach or suggest, and in fact teach away from, “creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers,” as recited in claim 1, and such teaching away is compelling evidence of non-obviousness.

Claims 6, 11, and 16 recite similar elements as previously argued above for claim 1 and are patentable over Barnes, the Open Directory Project, and the Open Directory Project Terms of Use for similar reasons as those argued above. Claims 4, 5, 7-9, 10, 14-15, and 18-19 are dependent on claims 1, 6, 11, and 16, and are patentable over Barnes, the Open Directory Project, and the Open Directory Project Terms of Use for the reasons argued above.

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2. Claim 9 is rejected under 35 U.S.C. 103(a) over Barnes (US Patent No. 6,993,533 B1), hereinafter “Barnes,” in view of the Open Directory Project and Tabb (US Patent Number 5,603,025), hereinafter “Tabb.”

Claim 9

Claim 9 is dependent on claim 6 and is patentable over Barnes and the Open Directory Project for the reasons argued above.

Tabb at column 20, lines 33-35 recites: “Again, portions of the report on this page are highlighted to indicate that additional detail is available (via hypertext links),” which does not make up for the deficiencies of Barnes and the Open Directory Project, as previously argued above. Thus, claim 9 is not taught or suggested by the hypothetical combination of Barnes, the Open Directory Project, and Tabb.

3. Claim 20 is rejected under 35 U.S.C. 103(a) over Barnes (US Patent No. 6,993,533 B1), hereinafter “Barnes,” in view of the Open Directory Project, and Pearson (“Default Value”), hereinafter “Pearson.”

Claim 20

Claim 20 is dependent on claim 16 and is patentable over Barnes and the Open Directory Project for the reasons argued above. Pearson is directed to “Both Table and View Fields [that] have a DefaultValue property,” which does not make up for the deficiencies of Barnes and the Open Directory Project, as previously argued above. Thus, claim 20 is not taught or suggested by the hypothetical combination of Barnes, the Open Directory Project, and Pearson.

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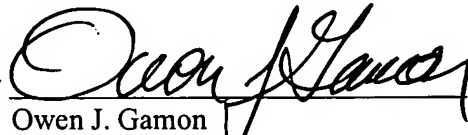
Conclusion

Appellant respectfully requests reversal of the above rejections. If the Board is of the opinion that any rejected claim may be allowable in amended form, then appellant also respectfully requests a statement to that effect.

Respectfully submitted,

Date February 6, 2008

By



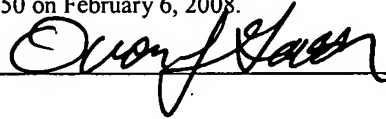
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Name Owen J. Gamon

Signature



8. CLAIMS APPENDIX

1. A method comprising:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers;

finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client;

requesting a plurality of records from the one of the plurality of information suppliers;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers;

selecting a subset of a plurality of characteristics from the plurality of records based on the model norm;

preparing a report with the subset;

ordering the subset of the plurality of characteristics in the report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the plurality of records;

ordering the plurality of records in the report based on a sort rule in the model norm;

receiving a favored norm from the one of the plurality of information suppliers of a selected record in the report;

selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset; and

creating a second report with the second subset.

4. The method of claim 1, wherein the preparing the report further comprises:

preparing extra characteristics not in the subset in a least-significant column of the report as a sequence of name-value pairs.

5. The method of claim 4, wherein the preparing extra characteristics further comprises:

ordering the name-value pairs based on a relative significance in a favored norm.

6. A storage medium comprising:

means for registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers;

means for finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client;

means for requesting a plurality of records from the one of the plurality of information suppliers;

means for creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers;

means for selecting a subset of a plurality of characteristics from the plurality of records based on the model norm;

means for preparing a report with the subset;

means for ordering the subset of the plurality of characteristics in the report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the plurality of records;

means for receiving a favored norm from the one of the plurality of information suppliers of a selected record in the report;

means for selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset; and

means for creating a second report with the second subset.

7. The storage medium of claim 6, wherein the means for preparing further comprises:

means for preparing extra characteristics not in the subset in a least-significant column of the report as a sequence of name-value pairs.

8. The storage medium of claim 6, wherein the means for preparing further comprises:

means for preparing extra characteristics not in the subset in a series of columns ordered based on a relative significance in a favored norm.

9. The storage medium of claim 6, wherein the means for preparing further comprises:

means for preparing an indicator of whether extra characteristics not in the subset are available.

10. The storage medium of claim 6, further comprising:

means for ordering the plurality of records in the report based on a sort rule in the model norm.

11. A storage medium encoded with instructions, wherein the instructions when executed comprise:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers;

finding one of the plurality of areas of interest associated with one of the plurality of information suppliers that matches a field of interest requested by a client;

requesting a plurality of records from the one of the plurality of information suppliers;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers;

selecting a subset of a plurality of characteristics from a plurality of records received from the one of a plurality of information suppliers, wherein the selecting of the subset is based on the model norm;

preparing a first report with the subset, wherein the preparing further comprises ordering the plurality of records in the first report based on a sort rule in the model norm;

ordering the subset of the plurality of characteristics in the first report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the records;

receiving a favored norm from the one of the plurality of information suppliers;

selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset; and

creating a second report with the second subset.

14. The storage medium of claim 11, wherein the creating further comprises:

ordering the subset of the plurality of characteristics in the second report based on a relative significance in the favored norm.

15. The storage medium of claim 11, wherein the creating further comprises:

ordering the plurality of records in the second report based on a sort rule in the favored norm.

16. An electronic device comprising:

a processor; and

a storage device encoded with instructions, wherein the instructions when executed on the processor comprise:

registering a plurality of information suppliers and a plurality of areas of interest associated with the plurality of respective information suppliers;

finding the plurality of areas of interest associated with the plurality of information suppliers that match a field of interest requested by a client;

requesting a plurality of records from the plurality of information suppliers;

creating a model norm based on a data dictionary, wherein a format of the data dictionary is standardized by an agreement among the plurality of information suppliers,

selecting a first subset of a plurality of characteristics from the plurality of records received from the plurality of information suppliers, wherein the selecting the first subset is based on the model norm,

preparing a first report with the first subset,

ordering the first subset of the plurality of characteristics in the first report based on a relative significance of the characteristics in the model norm, wherein the relative significance specifies a different order of the characteristics than the records, ordering the plurality of records in the first report based on a sort rule in the model norm, receiving a favored norm from one of the plurality of information suppliers, wherein the one of the plurality of information suppliers is associated with a selected record in the first report, selecting a second subset of the plurality of characteristics from the plurality of records, wherein the favored norm specifies the second subset, and creating a second report with the second subset.

18. The electronic device of claim 16, wherein the creating further comprises:

ordering the second subset in the second report based on a relative significance in the favored norm.

19. The electronic device of claim 16, wherein the creating further comprises:

ordering the plurality of records in the second report based on a sort rule in the favored norm.

20. The electronic device of claim 16, wherein the instructions further comprise:

propagating the plurality of records with a default value specified in the model norm if the plurality of records lack a value.

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9. EVIDENCE APPENDIX

None.

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10. RELATED PROCEEDINGS APPENDIX

None.